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Price Three Cents

CLASS ELECTIONS HELD LAST MONDAY

Robert P. Hackett Is Elected
President of Senior Class—
Freshmen Poll Heavy Vote—
Several Close Contests

TOTAL OF 549 VOTES CAST

Elections for the Junior, Sophomore and freshman classes were held last Monday. In spite of the unsettled conditions a large number of nominations were handed in and the ballots contained the names of many of the prominent men of the three classes. Judging from the size of the crowd which filled room 10-267 from 8:30 to 4:30 o'clock Monday, great interest was shown in the elections this year.

As usual the freshmen polled the heaviest vote with 245 ballots, the sophomores second with 199 votes, and then the Juniors who had 105 votes. There were two very close contests, for the presidency of the Senior Class and for the treasurer of the freshman class. In the first case Hackett was victorious over the second man to the extent of two votes. In the freshman elections Carpenter triumphed by one vote. Such was the popularity of some of the candidates for the other positions that the number of votes polled for one man exceeded the sum of those of his opponents.

The Juniors elected Robert P. Hackett as president; James W. Reis, Jr., vice-president; Charles J. Parsons, secretary; John S. Coldwell, treasurer; William H. Banks, Jr. and George C. McCarten, Institute Committee; John Meader and Amos N. Prescott, Executive committee.

The Sophomores chose John C. Nash for president; John J. Hines, Jr., vice-president; Leland D. Wilson, secretary; Vaughn J. Byron, treasurer; Edwin D. Ryer and Frank L. Bradley, Institute Committee; John W. Kellar and William M. B. Freeman, Executive Committee. The freshmen selected Rollin F. Officer as president; Lawrence W. Trowbridge, vice-president; John N. Worcester, secretary; Donald F. Carpenter, treasurer; Waldo Adams and Garvin Bawden, Institute Committee; William R. Barker and William D. Morrison, Executive Committee.

FRESHMAN CREW RACES
NOBLE AND GREENOUGH

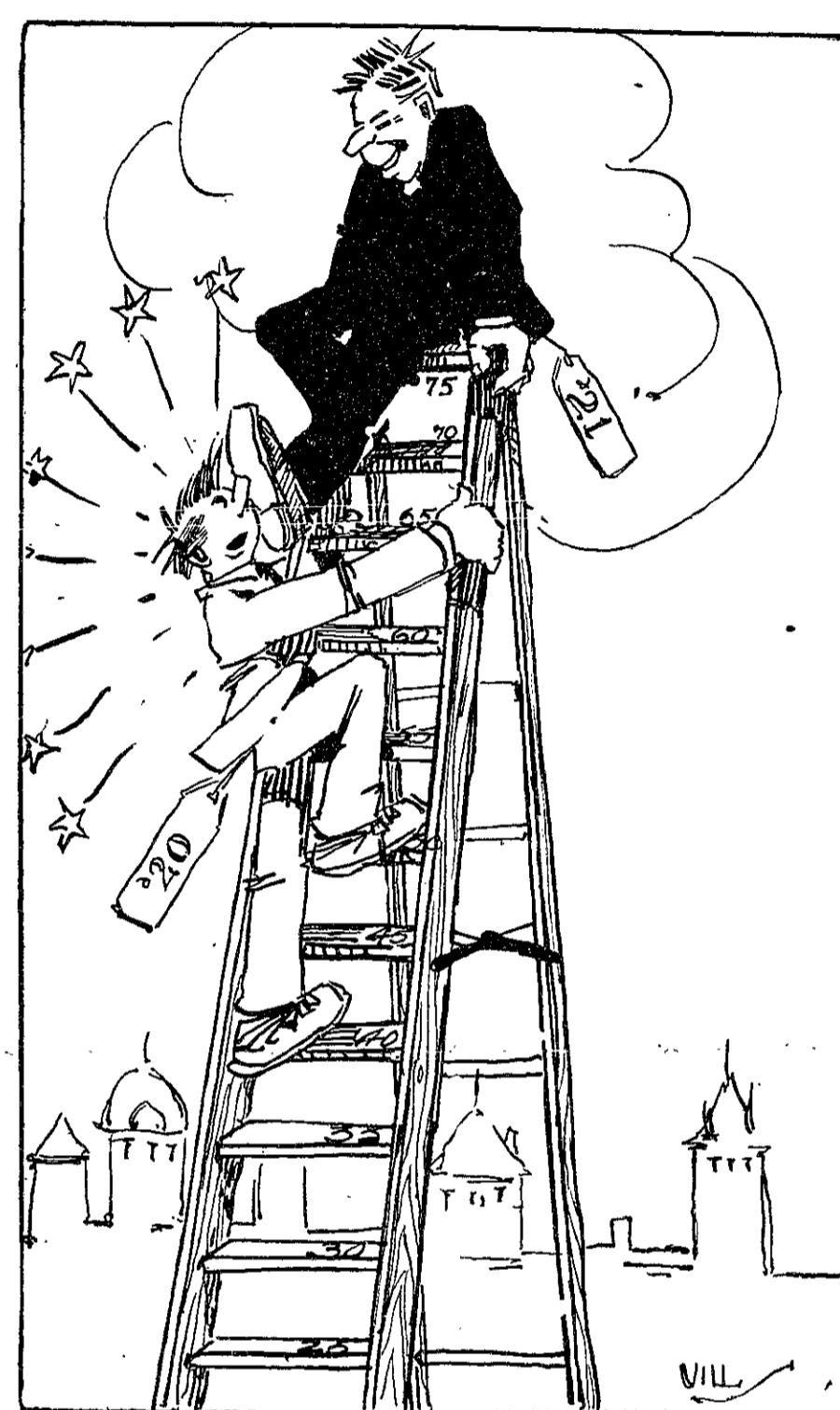
1921 Eight Meets Boston School On
Saturday at 1:45 O'clock

The freshman crew is hard at work this week on the Charles River in preparation for the race with Noble and Greenough Saturday afternoon over the Charles River Course. The race is scheduled to start from the Cottage Farm Bridge at 1:45 o'clock sharp, and the lineup for the race is as follows: Bow, Wheatland; 2 Lloyd; 3. Haskell; 4. Merrill; 5. Jakobson; 6. Kiser; 7. Northrop; 8. Thulman; Cox, Davidson. It has also been announced that the crew will race in the Harvard Regatta on May 25 against the Harvard freshmen and Noble and Greenough.

Preparations are being made now by Manager Daube '19 of the varsity crew for races this summer. He urges all crew men to report to the B. A. A. boat house any afternoon from now on at 5:00 o'clock for preliminary training. Regular work will start about June 10, and the first race will probably be held on July 4 on the Charles at the New England Rowing Association regatta. The next on the tentative schedule is the West Lynn Boat Club, who will be met probably July 13 in Lynn Harbor. Dennis J. Dinneen of the West Lynn club announces that nine cups to the value of \$150 will be donated for this race. This is sure to strengthen the competition and make the races very close. Other races may be held with the Farragut Club of Lynn and Union Club of Boston.

Work will continue throughout the summer on the Charles, and Manager Daube is confident that a winning crew

FRESHMEN 100—SOPHOMORES 60



THE U-BOAT PROBLEM

Submarine Talk by Simon Lake
at E. E. Society Meeting

At the final meeting of the Institute Branch of the American Institute of Electrical Engineering, Simon Lake, who has achieved international fame through his experiments with various types of submarines, addressed the members and visitors in Smith Hall, Room 10-250. Before introducing Mr. Lake, W. H. Costelloe '18, president of the society, announced the results of the elections of officers for next year. Paul M. Blye '19 was chosen president; W. R. Mackay '19, vice-president; Eugene R. McLaughlin '19, secretary; and Lloyd R. Sorenson '19, treasurer. Costelloe further announced that there was a considerable surplus in the treasury and that the society had invested in a Liberty Bond with this money. He then introduced Mr. Lake, who spoke not about the history of the development of the submarine, but on the answer to the military submarine.

Mr. Lake experimented for some years in the Chesapeake Bay and in Long Island Sound with a submarine which was called the Argonaut. He improved upon his first design and built successively the Argonaut Jr. and the Argonaut First. He reached in 1900 the climax of his experimentation and in that year submitted to the American government designs for a small submarine suitable to be carried on the davits of a battleship, a larger type which he called the coast defense submarine, and still a larger one than either of the others which was called the cruiser type. The "Protector," built according to the design for a coast defense boat, was con-

SCENARIO WRITING FOR NEXT YEAR'S SHOW TO BE OUTLINED

Harrington to Explain His Work in the
Past Seasons

On Friday at 5:00 o'clock there will be a meeting of all men who are interested in writing scenarios for next year's Show. Dick Harrington will tell the men of his experiences in this work so that all those interested may profit by what has been done this year. It has been decided by "Masque" to offer a prize of twenty dollars to the author of the best scenario for next year, the details of which may be had from Harrington on Friday. The fundamental requirement of a good show is a good scenario and so the management is especially anxious to get as many and as good scenarios as possible, and it is also to further this that "Masque's" prize has been offered.

For the benefit of those who have never written scenarios and who would like to try it may be said that it is by no means a difficult job. All that is needed is an underlying idea and a little ability in working it up. Of course the more original it is, the better. At any event, all those who are interested are asked to be present at the meeting on Friday as it is the last meeting that can be held this term. There are no special requirements; everyone who has had any experience at all, or who would like to have any experience is requested to be there.

FRESHMAN ADVISORS

There will be a meeting of the freshman advisors appointed for next fall on Thursday, May 16, at 1:30 o'clock in room 10-275. Dean Burton and Registrar Humphreys will speak to the men about their future work and its importance. The Dean considers it highly desirable that all the advisors be present at the meeting.

PRIZES OFFERED TO STUDENTS WORKING IN THE SHIPYARDS

A. F. Bemis '93, Chairman of the Corporation Visiting Committee, Offers Several Prizes
Amounting to \$900

SHIPBUILDING SMOKER NEXT TUESDAY

The Technology Committee on Shipyard Employment has announced that a total of nine hundred dollars in prizes has been offered to the Technology students who work in the shipyards during the summer vacation. This will undoubtedly cause a multitude of students who had been delaying to sign up immediately, for the prizes cover such a variety of things that every one has an equal chance. Not only are prizes offered for excellence in work, but also for working the minimum number of hours and days in a certain period of time, or in writing reports, making suggestions, telling of experiences and in short, keeping a diary.

C. E. SOCIETY ELECTIONS

The Civil Engineering Society held their elections for next year's officers last Monday evening, with the following results: M. F. Connors '19, president; W. M. Freeman '20, vice president; H. V. Hoes '20, Secretary; M. P. Smith '19, treasurer; M. H. Lee '20, assistant treasurer; Clark '19, S. Keith '19, executive committee. The vote for the Sophomore member of the executive committee resulted in a tie between H. D. Green and L. D. Wilson.

TECH SHOW NOTICE

All members of the cast, chorus, ballet, management, or the M. I. T. Orchestra who have not received their refund on tickets and who desire that refund, as well as all men to whom the show owes money for any other reason will please call for it between 12:00 and 2:00 o'clock Wednesday. This is the only opportunity that will be given.

SHIPYARD NOTICE

All men who intend to work in the Fore River Yard this summer, meet in room 10-267 today at 5:00 o'clock; and those who intend to work at the Bath Iron Works, meet in room 10-203 at the same time.

N. E. I. A. A. MEET

Annual Track Contest at Tech
Field Next Saturday

The New England Intercollegiate Track Meet will be held next Saturday afternoon at Tech Field, and will be the final meet in which the Institute track team will engage, with the exception of the All America contests soon to be held. The Institute varsity team recently defeated Harvard University with ease, and since that time has shown increasing promise for the Saturday meet. The members of the team who are Sophomores or freshmen, have received additional practice by their engagements with Worcester Academy and Phillips Andover Academy respectively.

The Sophomore track men were easy victors in their meet, defeating their opponents by the score of 60 to 40. As usual, Bossert won both of the dashes, Orman taking second place in the 100-yard event. The latter also won the 440-yard run by a good margin. In the half mile, Brickett trailed a Worcester runner all during the race, except for the last few yards, when he sprinted gamely and won by a squeeze of a couple of inches. Miller won both hurdle events in good time considering the condition of the field. Pierce showed up well by taking first in the broad jump and second in the high jump. Buckley, Burke and Wilson also did good work in the field events.

The summary of events of the Sophomore dual meet is as follows:

100-Yard Dash—Won by Bossert, Technology; Orman, Technology, sec-

The prizes were offered through Mr. A. F. Bemis '93, chairman of the Corporation Visiting Committee of the Department of Naval Architecture and Marine Engineering, who has sent the following letter announcing the conditions of the contest:

Mr. D. D. Way:

Dear Sir:

Whereas the work which Technology students will do this summer in shipyards will be a distinct contribution to the nation in carrying on the war, it should also materially contribute to the co-operation between the Institute and the industries in the training of the men.

In order to get for the Institute the greatest benefit from individual experience and with the probability of bringing out some helpful suggestions for better co-operative relations between the shipyards, I offer the following prizes open for competition to all Technology undergraduates who work in the shipyards during six weeks or more of the coming vacation period, under the plan to be carried out by the Technology Committee on Shipyard Employment.

1. For general reports as suggested below.

| | |
|--------------|-------|
| First Prize | \$100 |
| Second Prize | 90 |
| Third Prize | 80 |
| Fourth Prize | 70 |
| Fifth Prize | 60 |

II. For the best work done by an undergraduate in a shipyard.

Five prizes of fifty dollars each.

One to be awarded in each shipyard.

III. For the best suggestion for bringing about better co-operative relations between the Institute and the shipyards.

Five prizes of fifty dollars each.

In order to be considered for a prize in Group 1, a report must include the following:

1. A record of the student's work including:

a. A description of the principal kinds of work or tasks performed.

b. A statement of the total number of hours and days actually worked and the corresponding maximum number of hours possible during the period the student was employed at the yard.

c. A statement of the total wages received.

d. Descriptions of the students most interesting or valuable experiences.

2. An outline of a plan for co-operation between the Institute and the shipbuilding industry in training men for work in the industry or otherwise furthering and maintaining its growth.

The award of prizes in Group 1 will be based on the relative excellence of the reports submitted, as determined by the judges, considering all three or the following elements equally important.

1. Statement of work done during the summer.

(Continued on page 3.)

(Continued on page 3.)

(Continued on page 4)



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Although communications may be published unsigned if so requested, the name of the writer must in every case be submitted to the editor. The Tech assumes no responsibility, however, for the facts as stated nor for the opinions expressed.

The Editor-in-Chief is always responsible for the opinions expressed in the editorial columns, and the Managing Editor for the matter which appears in the news columns.

IN CHARGE THIS ISSUE

R. H. Smithwick '21.....Assistant Night Editor

WEDNESDAY, MAY 15, 1918

CURTAILING COMMENCEMENT EXPENSES

IN view of the fact that the Government bureau of education has requested all colleges to cut down on their commencement expenses, Technology has fallen in line with nearly all the other American colleges by omitting the commencement this year.

This may see hard to some, but if they look into the circumstances they will see that there are so few Seniors left it would be inadvisable to carry out the usual elaborate program. It is also a patriotic measure, by saving money for war purposes, and that which would be spent for the exercises would equip a large number of men for service overseas. Before this war is brought to a successful termination in favor of the Allies the American public must learn to economize as the Europeans have had to do. Money is absolutely necessary for war, and we must not spend it uselessly.

A college man naturally looks forward to his commencement, and when it is denied him of course he does not feel at all pleased. However, when a nation is engaged in a war for its existence the individual must conform to the needs of the majority. Let us hope that it will not be necessary to forego the pleasures of commencement week in following years, but if it is, we must cheerfully adapt ourselves to conditions.

STUDENT TAX AND CANDIDATES FOR CLASS OFFICE.

WHEN the Institute established a "Student Tax" for the purpose of defraying the expenses of activities and now requires that class representatives especially pay this tax, it is the height of cheek for men to run for office who have not paid their student tax. Four men are guilty of this offence. In this miniature republic of ours at Technology a man has no more moral right to run for office without first paying his student tax than a man has to run for state office without paying his poll tax. The only difference in administration that makes it possible to get away with any such procedure here at the Institute is that men are expected and trusted to do things honorably. Luckily there are few cases where this trust has been misplaced. The only good which criticism of these men can do now is to call to the attention of the school at large that looking for honor without being honorable is hardly the right policy.

A WAR FLAG.

NEXT to a new flag, nothing is more inspiring than the battle-torn remnants it was the custom to display shortly after the Civil and Spanish American Wars. We are very sorry to say, however, that it is no longer permissible to display these flags in parades or on buildings, and consequently much of their inspiring influence has been lost upon us of the younger generation. Nevertheless, if there be any among us who feels he needs the inspiration, we might suggest that a man with a healthy imagination could find a very good substitute in the torn and much tattered flag which flies daily over the dormitories. Aside from this somewhat flimsy utility we can not think of a good reason for flying a flag in such a condition. Perhaps some of you readers can. Send in your suggestions. Surely there must be some good reason for flying such a flag, else a new one would be bought. Simple bit of logic, isn't it?

If it takes two yards of that new paper toweling for one man to wipe his hands, it is fortunate that the Institute is not equipped with baths.

COMMUNICATION

To the Editor of THE TECH:

I was much astonished, to learn through your editorial comment in the issue of February 22nd that Dear Old Boston is not only effete but obsolete as well, when it comes to rules governing street traffic.

We of the West who enter or leave street cars without a thought of fear that some reckless motor driver will fail to come to a dead stop and hold his car until the street car is again on its way, can hardly believe that conditions are as you describe them, in a city of such pretensions as the "Hub" [sic]—laws of the Village of Oak Park, of which it is my good fortune to be a resident (by the way, our population now exceeds that of Brookline, Mass., and we thus become the largest Village in the United States), as well as those of the City of Chicago and surrounding cities and villages prohibit the practice of which you complain and punish infractions with heavy fines.

It seems to the writer that the "Fathers" of Boston are either asleep or criminally negligent, and in either case deserve such a shaking up as will lead them to enact laws which will give the public the protection to which in the interests of common humanity it is entitled.

Yours very truly,
(Signed) W. F. SARGENT.
Class of '75.
Commissioner of Public Works, Village of Oak Park, Illinois.

COMMUNICATION

May 11, 1918.
To the Editor of THE TECH.

In your issue of May 1st, in an article concerning the Medal which has been awarded me by the Institution of Naval Architects in London, you state that I am "popularly known as the head of all construction work in the navy," a statement which is so grossly erroneous that I find it necessary to correct it. The fact is that I am engaged by the Navy Department in a technical and scientific capacity under the Bureau of Construction and Repair, and am trying to the best of my ability to do such work as is assigned me.

Very truly yours,
(Signed) W. HOVGAARD.

LAST HISTORY LECTURE BY PROFESSOR HART OF HARVARD

"Relations of United States and Latin America" Is Subject

Professor Albert Bushnell Hart of Harvard University will deliver the last lecture in History and English 12, Saturday morning, May 18, in 10-250. Professor Hart's subject will be "The Relations of the United States With Latin America."

Professor Hart is one of the most eminent historians and public men of the country. He is the author of a large number of works on topics connected with history and government, among them being his "Foundations of American Policy," 1901; "National Ideals Historically Traced," 1907; "The War in Europe," 1914, and "The Monroe Doctrine," 1915. Professor Hart served at one time as exchange professor at the University of Berlin, and he has travelled extensively in South America. He was an important figure in the Progressive movement in the campaign of 1912. He has for many years given special attention to Latin American problems, and few men can speak with such great authority on this, perhaps the most important, aspect of our foreign relations.

SOLDIERS NEED TECHNICAL BOOKS INSTEAD OF FICTION

Soldiers do not read much fiction, but read only those things relating directly to their work, according to Adolph Strohm in a talk, "Experiences of a Camp Librarian," given at the University of Illinois recently.

Mr. Strohm, who is now camp librarian at Camp Gordon, Ga., also said that books on mathematics, from elementary arithmetic to calculus, were more in demand than any other kind of books. During the evening hours a good algebra or arithmetic is at a premium.

Instead of reading fiction, a soldier in the artillery will study everything he can find about explosives, horses, or the mathematics of long-range firing, while a soldier in the quartermaster's department will be reading all he can about the purchase of food and equipment, the storing of supplies, or the keeping of army accounts.

Mr. Strohm stated that women are not yet allowed to work in camp libraries except in a very few positions and must leave the camp at dusk. Mr. Strohm is also librarian of the Detroit Public Library, one of the largest in the country.

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SHIPBUILDING PRIZES

(Continued from page 1)

2. Outline of suggestion for co-operation.
3. Form of presentation of subject matter.

A winner of a prize in Group I (above) may be eligible for one in Group II also, but not for one in Group III. Groups II and III are not to conflict with each other.

Details for the contest must be left for future determination and judges will be announced later, but my present suggestion is that the matter be referred to the Advisory Committee appointed a year ago by President MacLaurin to assist in the conduct of the course in Naval Architecture and Marine Engineering, of which Mr. George J. Baldwin '77, Vice-President of the American International Corporation is chairman.

Very truly yours,

(Signed) A. F. BEMIS '93.

These prices which have been so kindly offered are sure to arouse a new interest among the student body and increase the sign-ups to date only about 150. The Committee is desirous of obtaining many more men in a short while, as it is planned to have a smoker next Tuesday, May 21st, for all men who are going to work in the shipyards this summer. This smoker is intended to serve as a "get-acquainted" meeting as well as one to serve as an end to the campaign, so that the men who are to work in the same yard will know each other. Final arrangements have not been made yet but all details ... announced in the next issue of THE TECH.

Of the 150 sign-ups, Course II is leading at present with a total of 25, with Course VI a close second with 24 and Course X next with 21. The class of 1921 leads the classes, as would be expected owing to the their large numbers. They have total of 68; 1920, a total of 50; 1919, one and 1918, one.

The Committee on Shipyard Employment announces that all men desirous of obtaining information of any nature concerning the shipyards may secure it at the Committee's office room 10-203, where a member is on duty at every hours of the day. A bulletin board has been placed outside the door where answers to all questions are posted. The only yards whose quotas have been filled to the present time are the Bath Iron Works, and the Fore River plant. These were filled several days ago and the latest applicants have decided principally upon the Philadelphia yards as their next choice, with Bridgeport about equally as popular.

N. E. I. A. A. MEET

(Continued from page 1)

and; Sullivan, Worcester, third. Time, 10 1-5s.

220-Yard Dash—Won by Bossert, Technology; S. Sullivan, Worcester, second; Bradley, Technology, third. Time, 23 1-5s.

440-Yard Dash—Won by Orman Technology; Dyke, Technology, second; R. Sullivan, Worcester, third. Time, 55s.

880-Yard Run—Won by Brickett, Technology; Thornhill, Worcester, second; Coughlin, Technology, third. Time, 2m 4 4-5s.

Mile Run—Won by McMahon, Technology; Dorr, Technology, second; Levangete, Technology, third. Time, 4m 2-5s.

High Hurdles—Won by Miller, Technology; T. Anderson, Worcester, second; J. Lee, Worcester, third. Time, 10 1-5s.

Low Hurdles—Won by Miller, Technology; Bowler, Worcester, second; T. Anderson, Worcester, third. Time, 27s.

High Jump—Won by Meade, Worcester; Pierce, Technology, second; Wilson, Technology, third. Height, 5ft 6 1/2in.

Pole Vault—Meade, Worcester; Pendleton, Technology, and Wilson, Technology, tied at 10ft 6in.

Broad Jump—Won by Pierce, Technology, 20ft 2 1/2in; Bowler, Worcester, second; 19ft 9 1/2in; Wilson, Technology, third, 19ft 4 1/2in.

Hammer Throw—Won by Lee, Worcester; Buckley, Technology, second; Burke, Technology, third. Distance, 10ft 8in.

Shotput—Won by Lee, Worcester; Orman, Technology, second; Mahoney, Worcester, third. Distance, 43ft 1in.

The freshman team did not fare as well as their upperclassmen for they were defeated by the Phillips Andover men in a close dual meet. The freshmen were crippled to some extent in the low hurdles and especially in the pole vault, for Sheldon, the varsity pole vaulter, injured his ankle and was unable to compete. The score, 49 1/2 to 46 1/2, was very close and showed the pep of the track team, in the face of this loss. Bawden won both the quarter mile and half mile races while Stone easily took the mile. Hays, who has not been very prominent hitherto in track, came into the limelight by winning the high hurdles and taking sec-

ond in the shot put. Both dashes were won by Andover, Technology placing third in each events. All the places in the broad jump were Andover's by a large margin.

The summary of the freshman dual meet is as follows:

100-Yard Dash—Won by Dwyer, Andover; Kennedy, Andover, second; Juniper, Technology, third. Time, 10 4-5s.

220-Yard Dash—Won by Dwyer, Andover; Kennedy, Andover, second; Juniper, Technology, third. Time, 53 1-5s.

440-Yard Run—Won by Bawden, Technology; Stevenson, Andover, second; Scott, Technology, third. Time, 53 1-5s.

880-Yard Run—Won by Bawden, Technology; Chittick, Andover, second; Hennessey, Technology, third. Time, 2m 7 2-5s.

Mile Run—Won by Stone, Technology; Callahan, Andover, second; Atwood, Technology, third. Time, 4m 45s.

High Hurdles—Won by Hays, Technology; Smith, Andover, second; Coakley, Andover, third. Time, 13 1-5s.

Low Hurdles—Won by Bailey, Andover; Wilson, Technology, second; Smith, Andover, third. Time, 29 3-5s.

High Jump—Won by Brimblecom, Technology, height, 5ft 2in; Emery, Technology, second, height, 5ft 1in; Wason, Andover, third, height, 5ft.

Broad Jump—Won by Davis, Andover, distance, 19ft 6in; Wheeler, Andover, second, distance, 18ft 11in; Bailey, Andover, third, distance, 18ft 4in.

Hammer Throw—Won by Raymond, Technology, distance, 123ft 1in; Baker, Andover, second, distance, 120ft 11in; Hays, Technology, third, distance, 117ft 10in.

Shotput—Won by Morgan, Andover, distance, 40ft 7in; Hays, Technology, second, distance, 39ft; Robinson, Andover, third, distance, 38ft 9 1/2in.

Pole Vault—Fletcher, Technology, and Grattick, Andover, tied for first at 9ft 6in; Conant, Technology, third, height, 9ft.

The prospects of the Institute team in the intercollegiates is rather good, according to the statements of prominent track judges who have been following the different new England college teams in their meets. The entries in this year's meet are Boston College, Bowdoin, Holy Cross Middlebury, Trinity, Tufts, Williams and Technology. Holy Cross and Bowdoin are said to have strong teams in spite of the drag that the war has made upon both these colleges.

The feature events of the meet will be the dashes and other track contests, for none of the competing teams are especially strong in the field work. Bossert '20, the Institute star, will be lined up with several strong men from Trinity, Bowdoin and Tufts. Saunders of the latter college, was the winner of the 220-yard dash in the intercollegiates of last year, and has made a speed of 10 seconds flat for the 100-yard dash in the century race of this year.

Bawden '21 will have a hard struggle with Mohoney of Bowdoin for first place in the quarter mile, but should at least be assured of placing in that event. Bawden has been a bit off form lately, but showed considerable improvement in the freshman meet with Andover last Saturday. Bowdoin comes out strong in the 880-yard run, for their man was a winner of the individual cross country championship last fall. He is also a strong runner in the two mile and may run in this event. McCarter '19 is in good form for the 880 and should show a clean pair of heels to all his opponents, with the possible exception of the Bowdoin runner. McMahon '20 will run in the two mile and is expected to do good work for the Institute in that event.

The mile run finds Technology represented by Capt. Herzog '19 and Haiface '20 both good runners and in fine form.

The hurdles events will be poorly contested if nothing sensational arises, for practically all of last year's stars have left college and will not compete.

Mills '20 has shown up well in the last few events and may place. In the pole vault, Sheldon '21 is very promising if his ankle does not go back on him.

The field events have no stars as contestants, but Pierce and Kellar '20 are expected to place in their respective contests.

Major F. Briggs of the B. A. A. referee. The track at the Institute has been under excellent care all spring and should offer an opportunity for fast work Saturday if the weather will hold out until that time.

FOUND ARTICLES

The owners of the following articles may obtain them by applying to the office of the Superintendent of Buildings and Power, room 3-005, with a description of the articles which have been lost:

One copy "American Society for Testing Materials"; 1 copy "Else van der Tanne"; 1 copy "A Table of Integrals"; notebooks; 1 folding lunch box; 1 pair kid gloves; 1 pair canvas puttees; triangles; 1 gold ring; 1 "Elk" pin.

FRESHMAN CREW

(Continued from page 1)

can be turned out with the wealth of material at the Institute.

Announcement has been made that E. T. Steffian '21 who was manager of the freshman crew at the time it won the spring race, has been awarded his numerals.

An interesting feature of the coming fortnight will be when the rowing crews of the Institute will survey a new course for themselves in the Charles River Basin. This is a proposition which every group of oarsmen would not undertake and therefore, if success is obtained in the work it will prove the excellence of Institute training. The work will be done along the banks by triangulation, and bench marks will be established for the alignment of the buoys in the water when they are ready to be placed.

There are one or two courses already surveyed in the Charles but they have reference to the Boston shoreline.

The removal of the Institute to Cambridge makes it desirable to have a new course, the end of which shall be on the Cambridge side and opposite the Institute buildings. The shape of the basin is well adapted to this plan, for with a start on the Boston side near the Cottage Farm bridge the straight line runs through the arches of the Harvard Bridge, and the mile and a quarter ends on the Cambridge side at the new pier, under construction, in front of the Walker Memorial. This course will be parallel to the Cambridge shore for almost its entire length so that races may easily be seen by crowds of spectators without inconvenience.

NO MORE NATIONAL GUARD UNITS ACCEPTED BY ARMY

Minnesota Second Infantry Ordered Disbanded

Indication that the war department has decided not to accept any additional National guard units in the forces sent abroad was seen recently in an order telegraphed to the governor of Minnesota instructing him to disband the second Minnesota infantry. The Minnesota authorities were anxious to have the unit in service as concrete evidence of the loyalty of the districts in which it was formed.

All National guard units in existence at the outbreak of war, were taken into the federal service. Many units have been formed since then and some have offered their services to the government for the war.

War department officials hold there is no available service for them in the military machine, even if it was not the consensus of expert opinion that better material could be obtained through the draft.

LAST WORDS OF LIEUT. ELY FILLED WITH PATRIOTISM

In a recent issue of THE TECH an account was printed of the death of Lieutenant Dinsmore Ely, of Chicago formerly of the Lafayette Escadrille, who died in France on Sunday, April 21, from injuries received in an airplane accident. Lieutenant Ely was a member of the Class of 1918, and was a student in Course IV from which he would have graduated this June.

A few days before the aviator's death he wrote a letter to his father, Dr. James O. Ely of Winnetka, which has just been received. The letter closes as follows:

"If anything should happen to me let's have no mourning in spirit or in dress. Like a Liberty Bond, it is an investment, not a loss, when a man dies for his country. It is an honor to a family, and is that the time for weeping? I would rather leave my family rich in pleasant memories of my life than numbered in sorrow at my death."

Dr. and Mrs. Ely held a funeral service for the aviator at their cottage in Donaldson, Wisconsin, placing his effects in his canoe, covering all with the national colors, and sinking it in a quiet nook of the lake, which was the favorite retreat of young Ely.

Professor Henry G. Pearson, of the English Department of the Institute, is in receipt of a communication from Dr. Ely, in which the latter requests that his son's life insurance policy with the New England Life Insurance Company be paid, and the returns devoted to the purchase of Liberty Loan Bonds, in compliance with Lieutenant Ely's wishes, as expressed in another of his letters from the front. Lieutenant Ely made this request in order "that his Bonds might keep on the fight after he was gone."

FRESHMAN NINE VS. NEWTON

The freshman baseball team is to play its third game of the season Saturday with the Newton High School team. The game is scheduled for 3:30 o'clock at Clafin Field, Newtonville. The freshmen made poor showings in

their two previous games but Captain O'Hearn states that the men have been working hard and he expects the team to show a marked improvement in Saturday's game. The team has been severely handicapped by the men not being able to get together for regular practice.

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T. C. A. BOOK EXCHANGE

The T. C. A. wishes to advise the following men that the money due them on book exchanges is now ready for them at the T. C. A. office. The following men are requested to call at the office at as early a date as possible so that accounts may be straightened:

M. C. Balfour, D. A. Barnes, L. E. Beaulieu, P. M. Berke, R. Berkowitz, J. H. Blodgett, R. F. Brooks, P. W. Burke, H. P. Couch, J. H. Coyle, P. R. Craighead, H. J. Dooley, DuVernet, A. A. Ellsworth, E. C. Fairbrother, Finklestein, T. S. Fogerty, Frederickson, G. A. Gustaveson, Halfacre, Harshowitz, A. F. Higgins, S. C. Hoye, B. Jones, F. Kingman, J. B. Lariviere, Longley, McGowan, H. C. Merrill, O. A. Mills, S. Page, T. A. Pierson, P. L. Rhodes, H. E. Richards, F. R. Robinson, M. H. Role, Rushton, Searles, F. W. Sears, Thurston, H. C. Wang, E. Webber, G. R. Whitehead, H. E. Wilks, Wymen.

U-BOAT PROBLEM

(Continued from page 1)

structed and tried out by a board appointed by the Navy Department. The vessel, after exhaustive tests, was approved by the board and a bill for its purchase and the purchase of the right to Mr. Lake's designs was passed by the Senate, but was defeated in the House, and the result was that the boat was sold to Russia. Several more like it were also built for the latter government. The first one reached Russia during the peace negotiations at the close of the Russo-Japanese war so that the submarines did not see actual service at that time.

About 1905, Germany also had started her experimenting with submersibles and had developed an unsuccessful type which failed to function properly. Von Tirpitz even at that time realized the usefulness of the submarine not only as a defensive but also as an offensive weapon and negotiated with Mr. Lake to secure his designs or at least to secure his aid in perfecting the existing German designs. Mr. Lake consented to the latter project and spent two years in Berlin working for the German Government. During that time the Germans succeeded in their efforts to find out about his theories and, without any recompense whatsoever, used his designs to a large extent in their own submarines, developing the so-called hydroplane boat which is submerged on an even keel by means of diving rudders which supplement the water tanks.

Mr. Lake then continued on his subject and emphasized the fact that he believes to be true, namely that the answer to the military submarine lies in the construction of submarine cargo ships. He said that it was an enormous economic waste to try to build merchant ships faster than the Germans can sink them, and that submarine cargo ships up to ten thousand ton capacity can be constructed at very nearly the same price per ton as the ordinary tramp ships which are being constructed, although the first may be more because of the necessity of designing and building special machinery for their production. He went into details as to the relative strength of the two types of vessels, their capacity and their sea-going qualities, and showed that the submarine boat excelled in every way the merchant ship of the usual type. The cargo submarine, of which he showed designs during the course of the talk, is more economical to build and to run, for there is no expensive and useless above-water construction and fitting on them and consequently they require no deck crew. The sea-going qualities of these boats are far better than those of the ordinary ship, because in case of a storm they can run awash or submerge entirely and so escape the violence of the sea. Mr. Lake described the "Deutschland" and told of his personal experiences during that vessel's visit to this country. He went to Baltimore when the boat first arrived here, to see whether or not she infringed upon his patents and, when he found that she did, and told the North German Lloyd agents here that he intended to bring suit for infringement, the Germans offered him contracts for the construction of the same type of vessel in this country. The negotiations over this proposition were not completed before the entry of the United States into the war and so the cargo carriers were never built here.

After he had discussed the usefulness of the cargo submarine in transatlantic service, Mr. Lake went on to describe other uses to which such a boat can be put and told something of his own experiences in trying out different ways of using them. He has tried out boats equipped with devices for raising the cargoes of sunken vessels; and in this connection he said that it was not an easy thing to locate a sunken vessel even though the location may be known to lie within two or three miles, for he searched for five months for a boat that went down and was seen by several people at the time it sank so that its location was fairly definite. He cited other instances of long searches for vessels which were believed to be in a certain limited area. Then the question of using submarine cargo carriers to keep the traffic on the Great Lakes going during the winter months when the surface is frozen was considered, and Mr. Lake gave some interesting facts with regard to this use of boats, showing a lantern slide of a submarine beneath the ice and one in which the boat was pictured with its periscope through a hole in the frozen surface.

Mr. Lake outlined in a brief but interesting way the development of submarines in France, England, Germany, Austria, Russia, Italy and the United States, accompanying his words with slides showing the types of submarines in each of these countries and their development since about 1900. He described the type of engine in many of the models and also the torpedoes which are used in the submarines. In talking of the mine-planting submarines Mr.

Lake showed his own design for such a vessel and also showed a slide of the German type which is playing such havoc with shipping in the North Sea.

In concluding his address, Mr. Lake further emphasized the cargo-submarine as a means to defeat the military submarine menace, and said that even though a cargo submarine were hit by a torpedo, the air pressure which is used to drive the water out of the ballast tanks could be utilized to keep the craft from sinking and that even though it were broken in two the cargo vessel could be brought to the surface and could make port by the air pressure thus maintained and by the bulkheads which are constructed even more strongly than those of the merchant vessels which sail on the surface of the water.

After Mr. Lake had concluded, he was questioned by the audience and gave more information about the practical value of the submarine as a cargo carrier and about the details of construction of the military types. President Costelloe then turned the meeting over to President-elect Bye who gave a short speech of appreciation in behalf of the incoming officers and told about the plans of the society for the coming year and especially for the summer. He said that since the Junior class would be at the Institute during the summer it would be possible to continue the work of the society during the time and to plan for the Sophomore membership for the fall. The audience then adjourned to the Caf where refreshments were served.

SUMMER COURSES TO BE GIVEN AT THE INSTITUTE

For its summer schedule this year Technology will maintain the regular summer courses, the Civil Engineering camp at East Machias, Maine, which is obligatory for Sophomores in certain courses, special studies for the freshmen who entered the Institute in February, and others anticipatory of the fourth year by the Juniors, who will thus be ready for the service of their country in January, 1919, five months ahead of the regular graduation time. The bulk of the students will be engaged throughout the summer in the very necessary shipyard help to which Technology counts on sending several hundred men.

The first year class which entered the Institute in February was accepted with the understanding that the students should continue their studies throughout the summer and enter the second year class with those who registered at the Institute last September. The closing exercises of the present term for these men will be on May 22 with examinations the following week. There will then be a twelve days vacation and the regular summer term will begin on Monday, June 10.

In view of the existing emergency the faculty has re-arranged the schedules of the Class of 1919 so that the work will be completed in January instead of June. The changes require that all who wish to graduate with the class shall take a term's work during the coming summer. In the order of exercises for the fall term the Senior courses have been re-arranged to meet the possible needs of those obliged to enter military service between September, 1918 and January, 1919. Men who are so called will be recommended by the faculty for their degrees provided they have satisfactorily completed their courses up to the time of their entry into the service.

The Institute will carry forward the usual Summer School courses which will be valuable for students who wish to catch up in one or more matters in which they have fallen behind, or who wish to anticipate the work of the coming year. They include courses in Mechanical Engineering, Architecture, Biology and Public Health, Chemistry, Drawing, English, Mathematics, Modern Languages and Physics, which begin at various dates, and which are outlined in the bulletin on summer courses. For the Sophomores the Summer Engineering Camp is obligatory. This will open on Tuesday, July 30, and close on Friday, September 30.

In addition to these courses the schools now maintained for the Army and Navy in Aerodynamics will be continued through the summer in accordance with the planning of these branches of the service.

ARCHITECTURAL SOCIETY ENJOYS ANNUAL OUTING

The Architectural Society was favored with excellent weather on its annual outing last Saturday. The trip was one of the most successful in years, and the participants unanimously voted it one of the best they had ever had. Nineteen men left the wharf at the foot of State Street at noon. The party cruised down along the southern water-front into Dorchester Bay. From there they sailed to a small island in Hingham Bay, where they landed and had a light lunch of boiled lobster and sandwiches. After the men had become

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Spies and Lies

German agents are everywhere, eager to gather scraps of news about our men, our ships, our munitions. It is still possible to get such information through to Germany, where thousands of these fragments—often individually harmless—are patiently pieced together into a whole which spells death to American soldiers and danger to American homes.

But while the enemy is most industrious in trying to collect information, and his systems elaborate, he is *not* superhuman—indeed, he is often very stupid, and would fail to get what he wants were it not deliberately handed to him by the carelessness of loyal Americans.

Do not discuss in public, or with strangers, any news of troop and transport movements, of bits of gossip as to our military preparations, which come into your possession.

Do not permit your friends in service to tell you—or write you—“inside” facts about where they are, what they are doing and

vice in the Expeditionary Force, and other tales certain to disturb American patriots and to bring anxiety and grief to American parents.

And do not wait until you catch some one putting a bomb under a factory. Report the man who spreads pessimistic stories, divulges—or seeks—confidential military information, cries for peace, or belittles our efforts to win the war.

Send the names of such persons, even if they are in uniform, to the Department of Justice, Washington. Give all the details you can, with names of witnesses if possible—show the Hun that we can beat him at his own game of collecting scattered information and putting it to work. The fact that you made the report will not become public.

You are in contact with the enemy today, just as truly as if you faced him across No Man's Land. In your hands are two powerful weapons with which to met him—discretion and vigilance. Use them.

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rested sufficiently, the skipper of the boat, which was named "Harvard," strange as it may seem, headed for Nantasket Beach. Arriving within about fifty feet of the landing she came to a dead stop, and despite the captain's vain attempts to start her, she would not move an inch. Finally it was decided to look at the gasoline tank, and upon searching in this receptacle, it was found that it was bone dry. The party landed after being hauled into shore by a rope which was thrown them. Here they spent a few hours on the beach, in the amusement places, and enjoying themselves generally.

At about six o'clock the party had supper and then started for town. On the way back they went along the North Shore, arriving back in Boston at about quarter of nine.

The Society intends to hold its final meeting next Wednesday night in the Rogers Building on Boylston Street. Professor Sumner who was to address the students, finds it impossible to attend, so that the entertainment will be given entirely by the students. The program will take the form of stunts of various kinds performed by representatives of each class. Refreshments will be served after the meeting.

M. E. SOCIETY ELECTIONS

The elections of the Mechanical Engineering Society officers for the year 1918-19 will be held in the drawing room 4-460 on Wednesday and Thursday, May 15 and 16. On account of the well recognized and obvious necessity of finances for the successful carrying out of the purposes of the society, and for fairness to those who have

lived up to these small obligations, only paying members will be allowed to ballot. The nominations for the various offices are as follows:

Chairman—Charles Chayne '19, Francis T. Coleman '19, C. H. Tavener '19.

Vice-Chairman—Scott H. Wells '20.

Treasurer—E. F. Doten '19, S. Page '19.

Secretary—Edward Pierce '19, W. H. Vogt '19.

Governing Board (vote for three)—H. B. Blumberg '19, J. S. Carter '19, C. H. Ilsley '19.

LAST COSMOPOLITAN CLUB MEETING WILL BE FRIDAY

The last meeting of the Cosmopolitan Club will be held in the Caf at 8.00 o'clock on Friday, May 17. The management is making very extensive plans to have this affair one of the best and most interesting meetings of the year. Professor Lipka is preparing one of his interesting talks for the occasion. The entertainment should stir every member to make this final meeting a success. A cartoonist has been employed and he will try to amuse with his clever conceptions of the main issues of the day. J. Osma will also entertain with several musical selections. The announcement of the officers for the ensuing year will be made. The officers wish to see everybody out to make the windup a good one.

CLASS OF 1918

Members of the class of 1918 who wish to have the themes written by them in 1st and 2nd year English may obtain them by applying at the office of the English Department, 2-263.

HENRY G. PEARSON.